

**COMPOSITIONS AND METHODS FOR DETECTING *TREPONEMA*
*PALLIDUM***

ABSTRACT

5 Methods for the specific and highly sensitive detection of *Treponema*
pallidum infection comprising the use of specific antigenic proteins and peptides
unique to *Treponema pallidum* are provided. In particular, detection assays based
recognition of acidic repeat protein are provided. The methods of the present
invention are useful for detection of primary syphilis at early stages of infection. In
10 addition, the methods and compositions disclosed herein are directed to the
differential detection of specific *Treponema* infections enabling the identification of
causative agents for specific *Treponema* disease states: syphilis (*Treponema*
pallidum subspecies *pallidum*), yaws (*Treponema pallidum* subspecies *pertenue*
CDC-1 or CDC-2 strain), and bejel (*Treponema pallidum* subspecies *endemicum*).